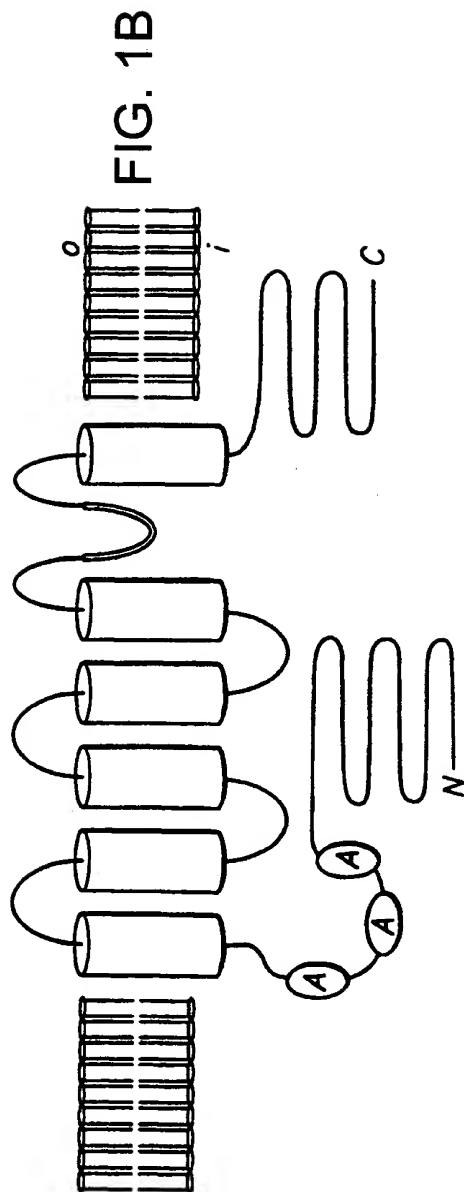


FOSTOT™ CDEB/650

Nucleic Acid Sequences Encoding Capsaicin
Receptor and Capsaicin Receptor-Related
Polypeptides and Uses Thereof
Filing Date: October 15, 2001
U.S. Serial No.: To Be Assigned
Paula A. Borden - Bozicevic Field & Francis, LLP
(650) 833-7710 Sheet 1 of 12

MEQRASLDSEESPPQENSCLDPPDRDPNCKPPPVKPHIFTTRSR 46
TRLFGKGDSEEA SPLDCPYEEGGLASCPIITVSSVLTIQRPDGPAS 93
VRPSSQDSVSAGEKPPRLYDRRSIFDAVAQSNQCQELSLPFLQRSK 140
KRLTIDSEFKDPE TCKTCLLKAMLNHNGQNDTIALLLDVARKTDSLK 187
QFVNASYTDSYY KGGQTALHIAIERRM TLLVENGADVQAAANGD 234
FFKKT KGRPGFY FGEPLSLAACTNQLAIVKFLQNSWQPADISARD 281
SVGNTVLHALVEVADNTVDNTKFTVTSMYNEILILGAKLHPTLKLEEIT 329
NRKGLTPLALAASSGKIGVLAYILQREIHEPECRH LSRKFTEWAYGCP 376
VHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRRHDMLLVEPLNRL LQ 423
DKWDRFVKR IFYFNFFVYCLYMIIFTAAAYY RPYVEGLPPYKLNKNTVG 470
DYFRVTGEI LSVSGGVYFFFRG IQY FLQRRPSLKSLFVD SYSEILFFV 518
QSLFMLVSVVLYF SQRKEYVASMV FSLAMGW TNMLYYTRCGFQQMGI 564
YAVMI EKMI LRD LCRFMFVYL VFLFCFSTAVV TLI EDGKNNSLPME ST 612
PHKCRGSACKP GNSYNSLYSTCL ELFKFTIGMG DLEFTENYD FKA V F 659
ILLAYVILT YILLNMLIALMGE TVNKIAQESKNIWKLQRAITILDTE 709
KSFLKCMRKAF RSGKLLQVGFTPDGKDDYRWCFRVDEVNWT TWNT 754
NVG I INEDPGNCEGVKRTL SFSLSRSGRVSGRNWKNFALVPLLRDAST 801
RDRHATQQEEVQLKH YTGSLKPEDAEVFKDS MVPGEK SEQ ID NO: 2 838

FIG. 1A

**FIG. 1C**

<i>rat VR1</i>	636	E L F K F T I G M G D L . . . E F T E N Y D F K A . V F I L L L . A Y V I L T	670
<i>human T12251</i>		E L F K F T I G M G E L . . . A F Q E Q L H F R G . M V L L L L L . A Y V L L T	
<i>Caliphora z80230</i>		S L F W A S F G L V D L V S F D L A G I K S F T R . F W A L L L M F G S Y S V I N	
<i>Drosophila TRP</i>		S L F W A S F G L V D L V S F D L A G I K S F T R . F W A L L L M F G S Y S V I N	
<i>Bovine x99792</i>		S L F W S I F G L I N L Y V T N V K A Q H E F T E . F V G A T M F G T Y N V I S	
<i>C. Elegans z72508</i>		R T F I M T I G E F S V L Y R E M S A C D N F W M K W I G K L I F V I F E T F V	
<i>rat VR1</i>	671	Y I L L L N M L I A L M G E T V N K I A Q E S K N I W K L Q R A I T I L	706
<i>human T12251</i>		Y I L L L N M L I A L M S E T V N S V A T T I D	
<i>Caliphora z80230</i>		I I V L L N M L I A M M S N S Y Q I I I S E R A D V E W K F A R S Q L W M	
<i>Drosophila TRP</i>		I I V L L N M L I A M M S N S Y Q I I I S E R A D T E W K F A R S Q L W M	
<i>Bovine x99792</i>		L V V L L N M L I A M M N N S Y Q L I A D H A D I E W K F A R T K L W M	
<i>C. Elegans z72508</i>		S I L Q F N L I A M M T R T Y E T I F L	

(SEQ ID NO: 14)
(SEQ ID NO: 15)
(SEQ ID NO: 16)
(SEQ ID NO: 17)
(SEQ ID NO: 18)
(SEQ ID NO: 19)

capsaicin 1 μ M

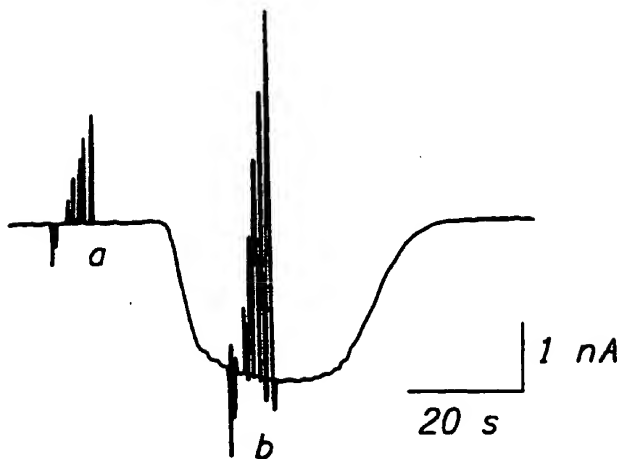


FIG. 2

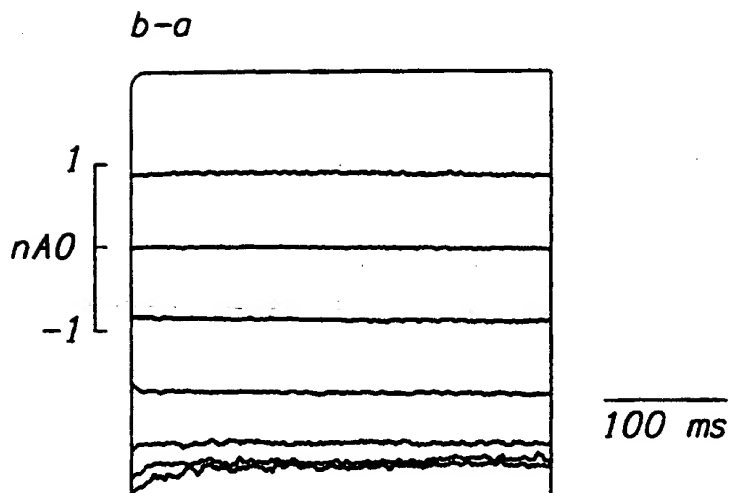


FIG. 3

09976303-10504
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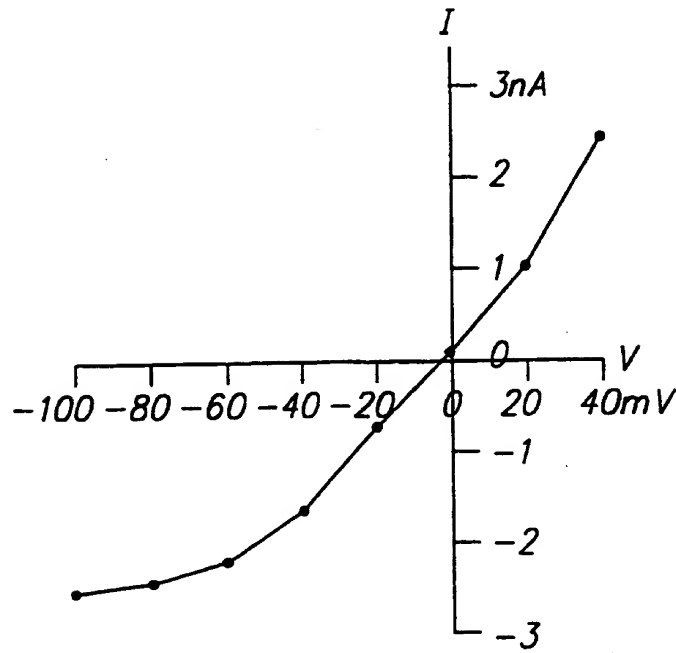


FIG. 4

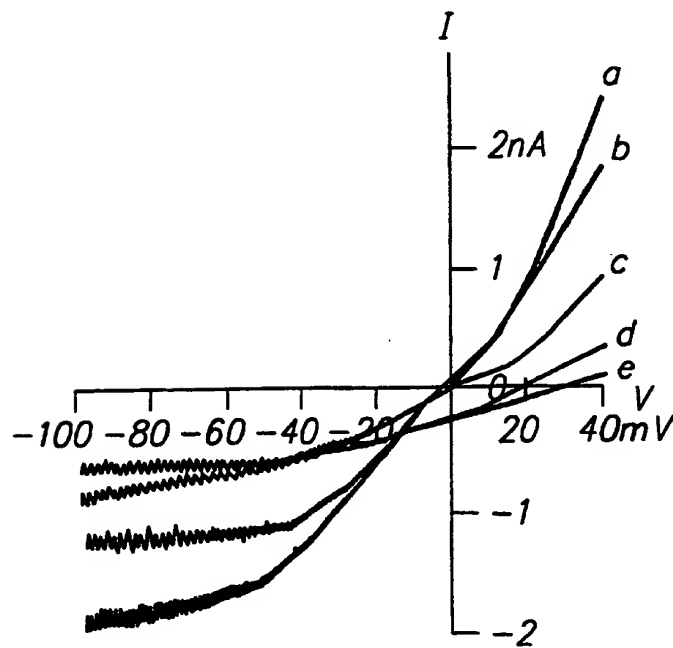
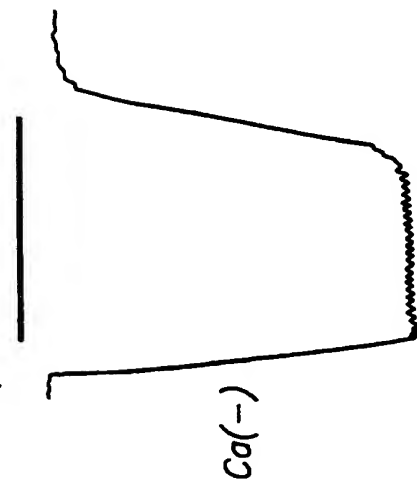


FIG. 5

FIG. 6A

capsaicin 1 μ M



Ca(-)

FIG. 6A

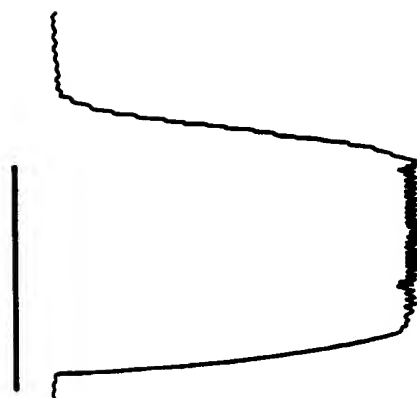


FIG. 6B

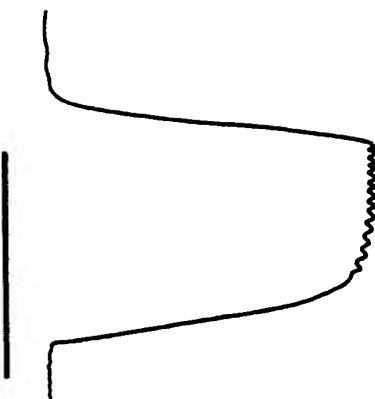
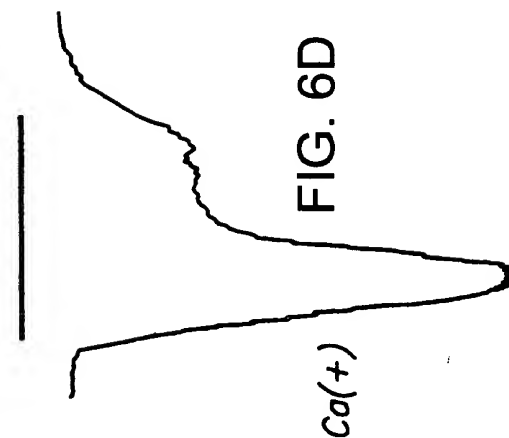


FIG. 6C



Ca(+)

FIG. 6D



FIG. 6E



FIG. 6F

1 nA
10 s

FIG. 7

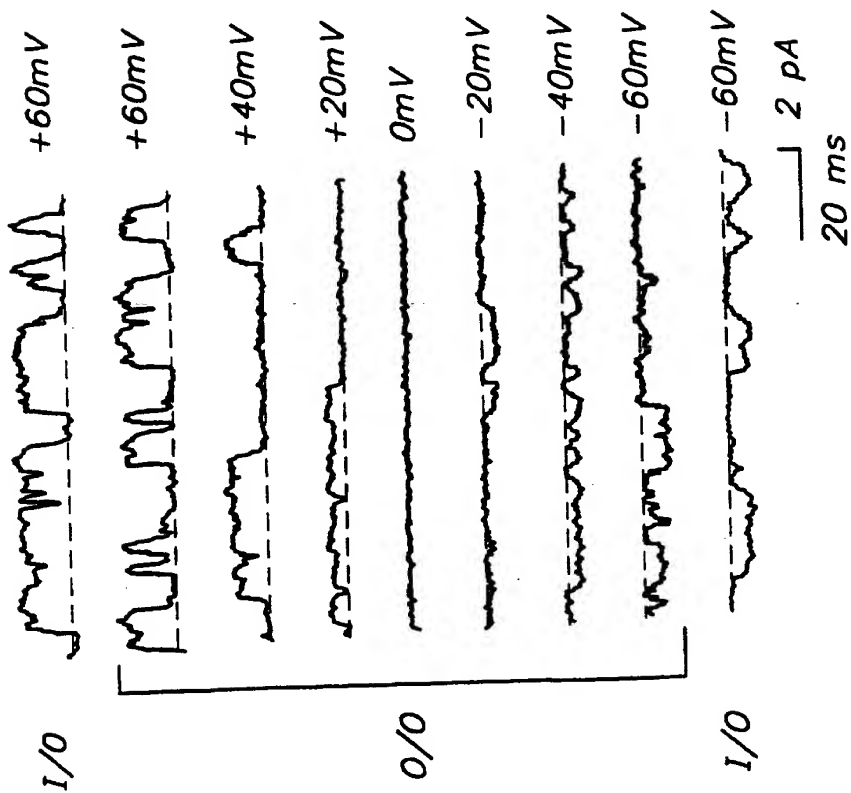


FIG. 7

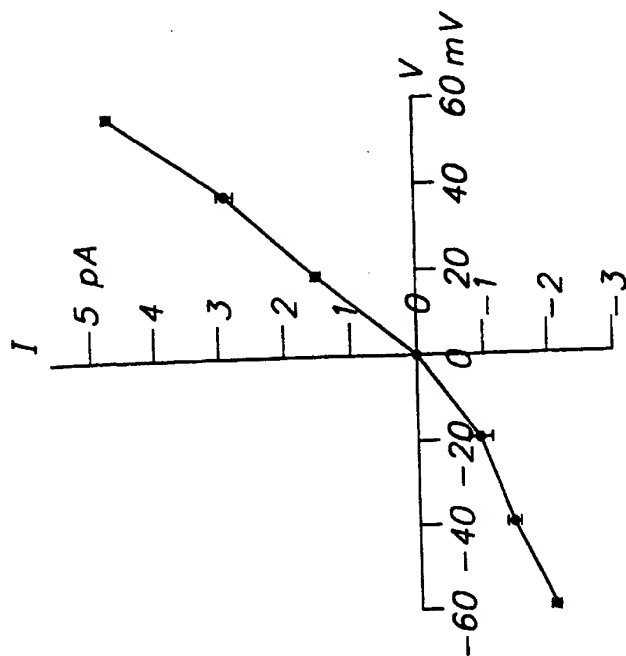


FIG. 8

FIG. 9A

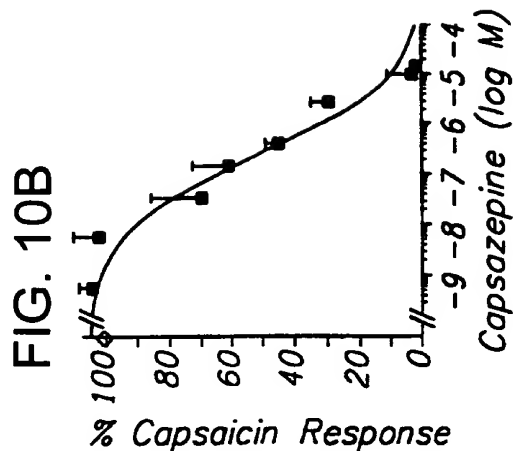
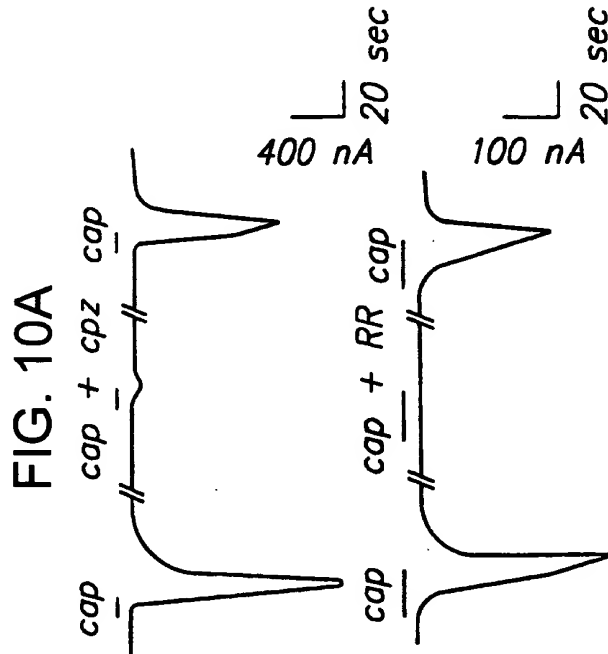
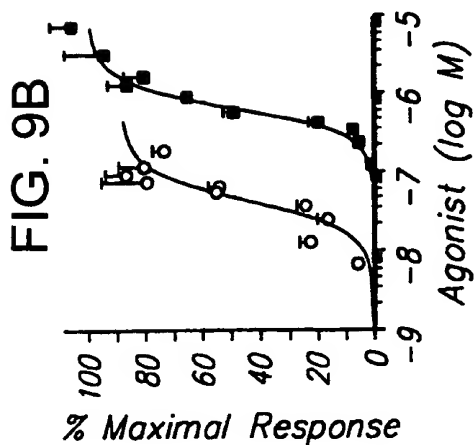
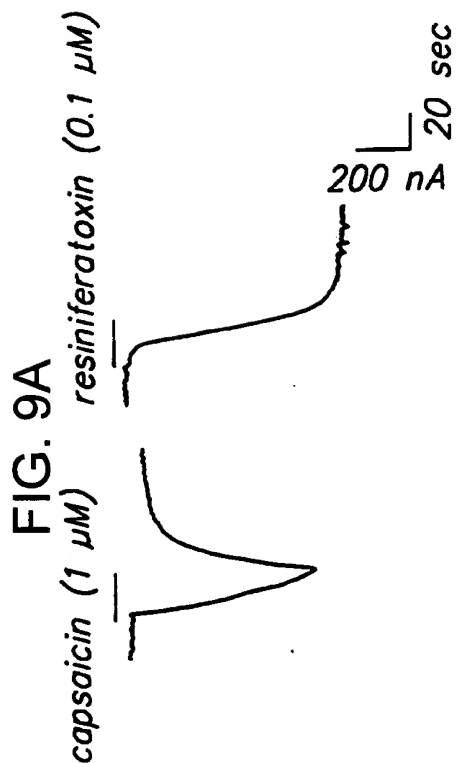


FIG. 11

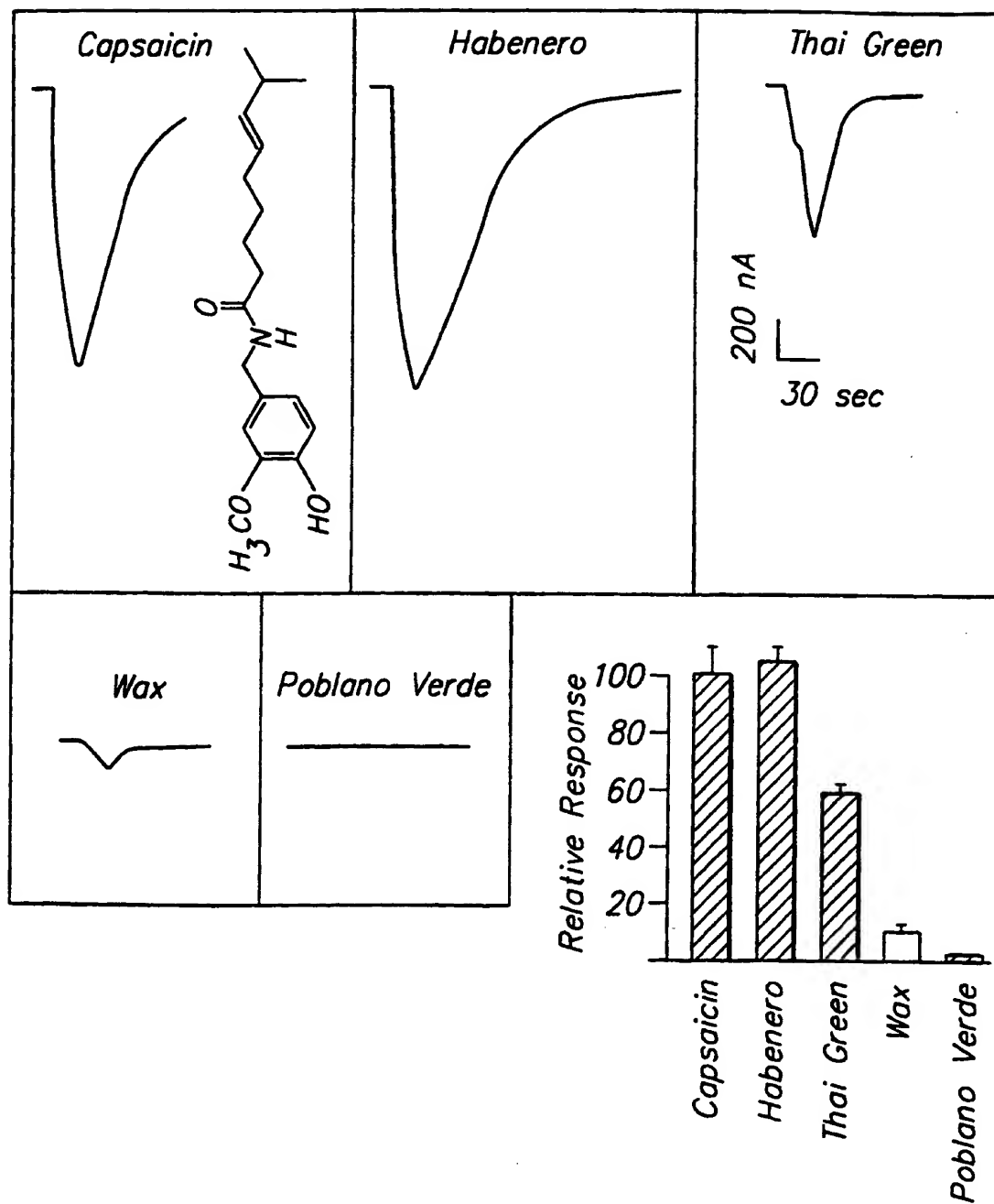


FIG. 11

FIG. 12

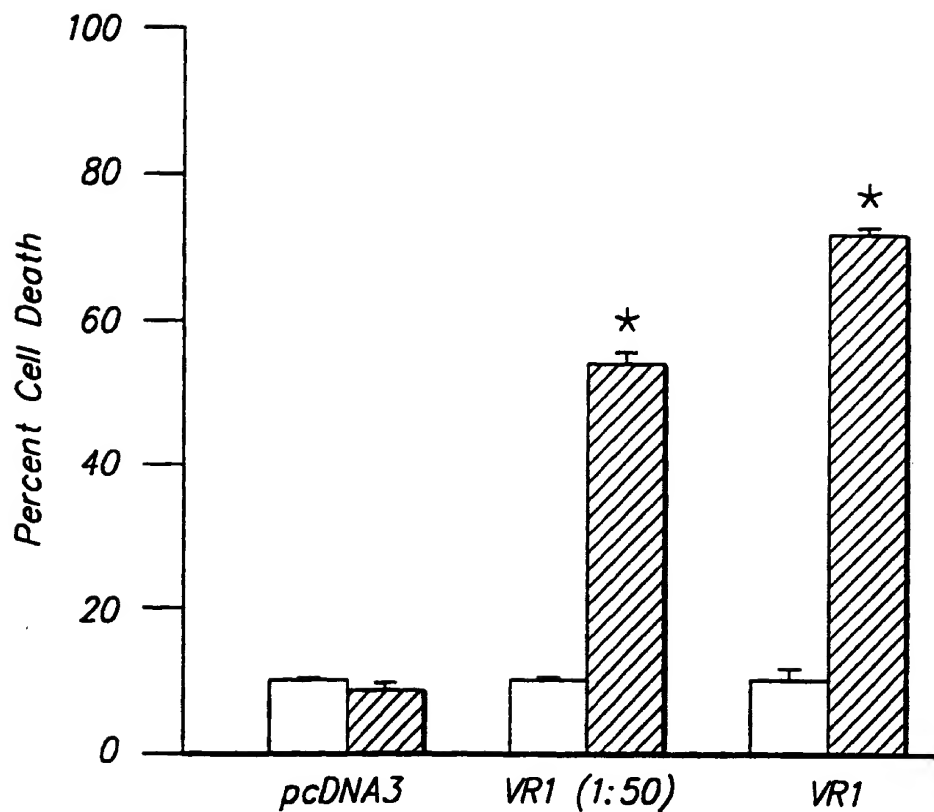


FIG. 12

FIG. 14

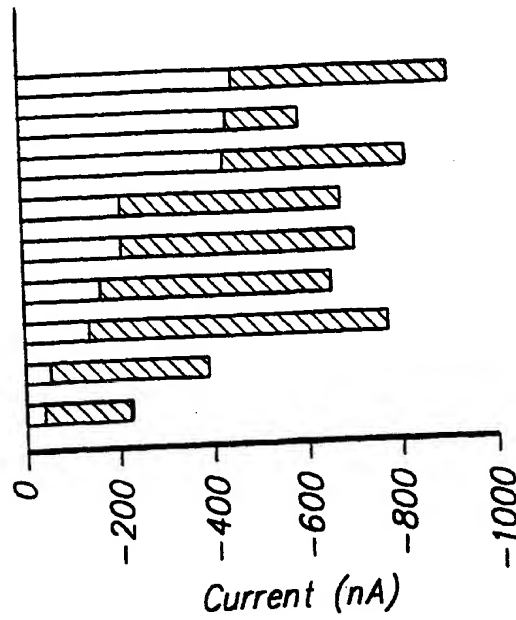


FIG. 13

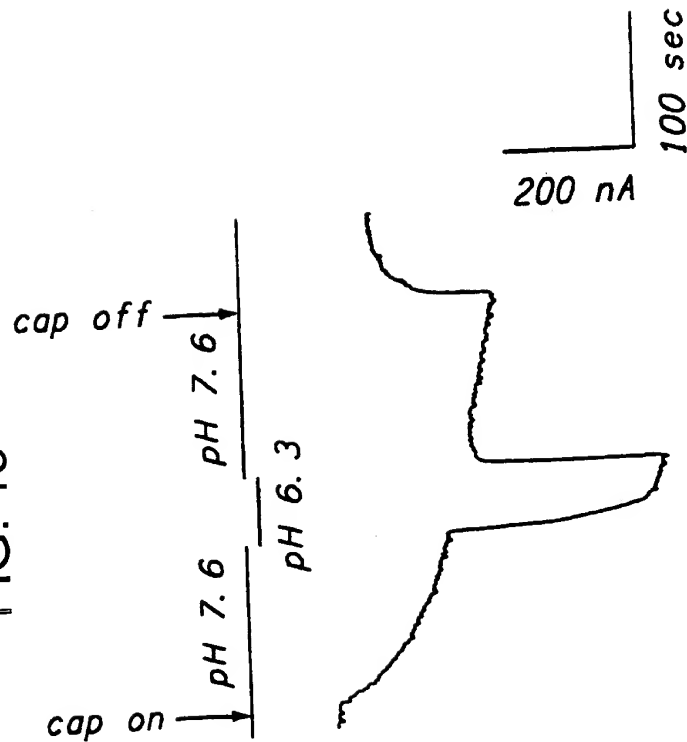


FIG. 15A

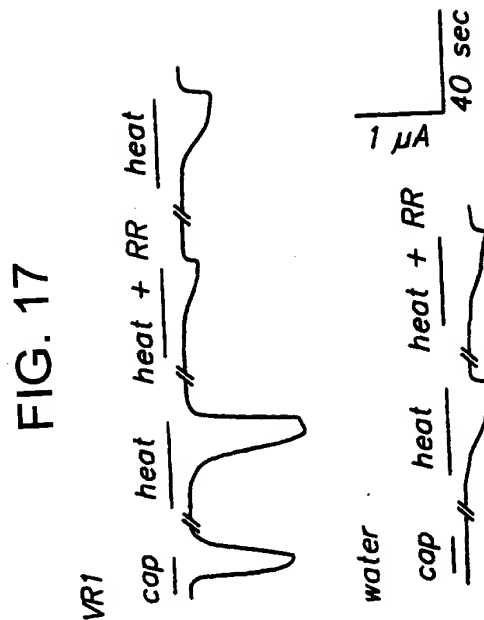
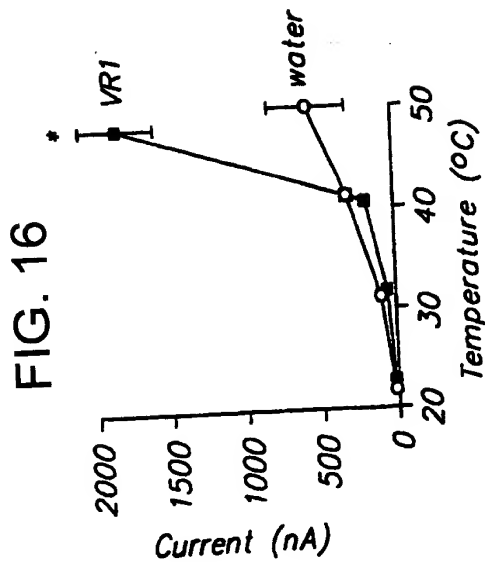
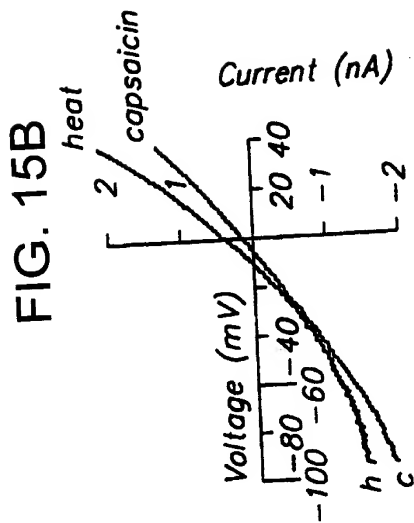
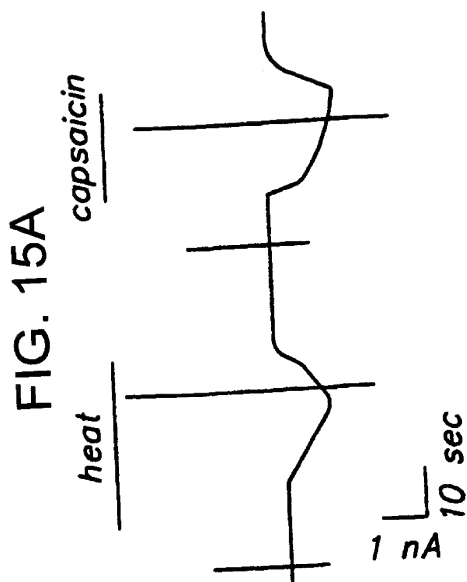


FIG. 18

FIG. 18

